Applicants: Anne Marie Rodriguez, et al.

Serial No.: 10/632,581 Filed : July 31, 2003

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## Amendment to the claims:

The following listing of claims will replace all prior versions and listings, of claims in this application.

## Listing of claims:

- 1. 8. (Canceled)
- 9. (Currently Amended) A cell population consisting essentially of cells according to any one of claims 1, 51 or 53. adult multipotent human stem cells, which cell population is either quiescent or is proliferating in the undifferentiated state, and requires growth factor to proliferate beyond 70% confluence, and wherein each of said adult multipotent human stem cell has a capacity for self-renewal preserved for at least 130 population doublings, and stably exhibits the following phenotype in vitro:
  - HLA Class I negative,
  - an endogenous telomerase activity of at least 20% of the telomerase activity of the HEK293T transformed cell line,
  - a normal karyotype, and
  - a degree of senescence of less than 0.05% at 60 population doublings.
- 10. (Previously Presented) The cell population of claim 9, wherein the cell population is clonal.
- 11. (Canceled)

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12. (Currently Amended) The cell population of claim 9[[11]], wherein the cell population requires is capable of proliferating in the presence of basic fibroblast growth factor (bFGF) to proliferate beyond 70% confluence.

13.- 52. (Cancelled)

53. (Currently Amended) The cell population according to claim 9,
wherein each of said adult multipotent human stem cells Am
isolated adult multipotent human stem cell, characterized in that
after reaching quiescence, it stably exhibits the following
phenotype in vitro at quiescence:

HLA class II negative,
CD3 negative,
CD13 positive,
LIF-R negative,
Oct-4 positive,

HLA class I negative,

Rex-1 positive,

ABCG2 positive-

and in that it has a normal karyotype and significant telomerase activity of at least 20% to 50% of the telomerase activity of the HEK293T transformed cell line, and a degree of senescence of less than 0.05% at 60 population doublings.

54. (Currently Amended) The cell <u>population</u> of claim [[53]]<u>9</u>, wherein the cell has immunoprivileged behavior in vivo and a capacity to migrate in the undifferentiated state.

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- 55. (New) The cell population according to claim 9, wherein each of said adult multipotent human stem cells has a self-renewal capacity preserved for at least 200 population doublings.
- 56. (New) The cell population according to claim 9, wherein said cell population can be isolated from human adipose tissue.
- 57. (New) The cell population according to claim 9, wherein each of said adult multipotent human stem cells can differentiate into a cell of endodermal, ectodermal or mesodermal origin.
- 58. (New) The cell population according to claim 57, wherein each of said adult multipotent human stem cells is capable of differentiating into an adipocyte, osteoblast, myocyte, chondrocyte or endothelial cell.
- 59. (New) A pharmaceutical composition comprising the cell population according to claim 9, and a physiologically acceptable excipient.
- 60. (New) A cosmetic composition comprising the cell population according to claim 9, and an excipient, vehicle, solvent, colorant, fragrance, antibiotic or additive suitable for use in a cosmetic product.